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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/026,080	02/19/98	HEMBREE	D M10-020-1A

MM12/0121

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EXAMINER

POTTER, R

ART UNIT

PAPER NUMBER

2822

DATE MAILED: 01/21/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
09/026,080

Applicant(s)
Hembree et al.

Examiner
Roy Potter

Group Art Unit
2822



☒ Responsive to communication(s) filed on Nov 1, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-73 is/are pending in the application.

Of the above, claim(s) 29-71 and 73 is/are withdrawn from consideration.

☒ Claim(s) 16-28 is/are allowed.

☒ Claim(s) 1, 7-10, 12, and 15 is/are rejected.

☒ Claim(s) 2-6, 11, 13, 14, and 72 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election

Applicant's election without traverse of Group I, I.e. claims 1 - 28 and 72 in Paper No. 4 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 8, 9, 10, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilton.

Hilton, U.S. Patent 5892,245, discloses a ball grid array package. As shown in Figure 2, the adaptor comprises an intermediate layer 34 formed by dielectric substrate 35 and elastomeric material-filled holes 36. Because this layer is formed by a combination of these two materials, the overall modulus of elasticity is different than the modulus of elasticity of the material filling the holes 36. The elastomer contains conductive particles such as silver, which create a conductive path through the layer 34. Column 2, beginning on line 62 describes the types of conductive particles which may be used.

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Allowable Subject Matter

Claims 2 - 6, 11, 13-14 and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16 - 28 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

King et al., U.S. Patent 5,140,405 discloses a semiconductor assembly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy Potter whose telephone number is (703) 308 - 4106.



***Roy Potter
Patent Examiner
Tech Center 2800***

Potter
January 18, 2000